APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,051	04/27/2001	Sev K. H. Keil	24491-0001001	1476

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EXAMINER
LASTRA, DANIEL

ART UNIT	PAPER NUMBER
3688	

NOTIFICATION DATE	DELIVERY MODE
10/23/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 June 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33,39-71 and 77* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33,39-71 and 77* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-33, 39-71 and 77 have been examined. Application 09/845,051

(SYSTEM TO PROVIDE CONSUMER PREFERENCE INFORMATION) has a filing

date 04/27/2001.

Response to Amendment

2.   In response to Non Final Rejection filed 01/25/2008, the Applicant filed an

Amendment on 07/24/2008, which amended claims 1, 22, 31, 39, 60, 69, and 77.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

Claims 1-33, 39-71 and 77 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Herz (US 6,029,195) in view of Using extremes to design products

and segment markets (Dialog file 75/00184535).

As per claims 1, 39 and 77 Herz teaches:

A computer implemented method for determining preference information,

comprising:

storing preference information for a plurality of consumers, the preference

information relating to an attribute of a product (see col 6, lines 15-67 "target objects

may be purchasable items...attributes can be product description"; col 16, lines 60-67

"target objects are consumer goods and the weight of the color attribute is small");

providing questions relating to the attribute to a consumer (see column 12, lines

25-38; column 18, lines 10-67; col 28, lines 45-60 "user profiles include an associative

attribute that records the user's relevance feedback on all target objects in the

system...rapid profiling procedure can rapidly from a rough characterization of a new

user's interests by soliciting the user's feedback on small number of significant target

objects, and perhaps also by determining a small number of other key attributes of the

new user, by on-line queries, telephone surveys or other means");

receiving answers to questions from the consumer (see column 18, lines 10-30

"the user explicitly indicates his or her interest for instance on a scale"; col 28, lines 40-

67 "multiple choice answers to questions);

determining, based on the *received trade-off question* answers, preference

information associated with the consumer (see column 6, lines 16-59; col 28, lines 40-

67);

validating the *trade-off question answers-based determined* preference

information of the consumer (see col 7, lines 1-17; column 30, line 46 – column 31, line

10). Applicant's specification defines "validating" as "predicting precision of the

preference information" (Applicant's specification page 9, lines 4-12). Herz estimates

each user's interest in various target objects and generates for each user a customized

rank-ordered listing of target objects most likely to be of interest to the user (Herz col 7,

lines 1-20); and

mixing, using a computing device, based upon the validating *of the trade-off question answers-based determined preference information*, the *trade-off question answers-based determined* preference information of the consumer with the preference information of the plurality of consumers (see column 7, line 19 – column 8, line 47; column 12, lines 25-35),

wherein a degree to which the *trade-off question answers-based determined* preference information associated with the consumer is mixed with the preference information associated with the plurality of consumers is different than a second degree to which second *trade-off question answers-based determined* preference information associated with a second consumer is mixed with preference information of a second plurality of consumers (see column 16, line 52 – column 17, line 57; col 19, lines 7-67; column 21, line 5 – column 22, line 29; col 24, line 60 – col 25, line 60; column 29, lines 1-35).

Herz does not teach that said questions are trade-off questions. However, the article Using extremes to design products and segment markets teaches that it is old and well known in the promotion art to use trade-off analysis to determine users' preference to target objects by receiving users response to attributes paired-comparisons involving a fraction of the attributes of said target objects (i.e. "medium fixed interest vs Low fixed interest" see page 8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Herz would use trade-off analysis to determine users' preference to target objects by receiving users response to attributes paired-comparisons involving a fraction of the

attributes of said target objects in view that it is old and well known to do trade-off analysis of products attributes, as taught by Using extremes.

As per claims 22 and 60, Herz teaches:

A computer implemented method for determining preference information, comprising:

storing preference information regarding a plurality of consumers, the preference information relating to an attribute of a product (see col 6, lines 15-67 "target objects may be purchasable items…attributes can be product description"; col 16, lines 60-67 "target objects are consumer goods and the weight of the color attribute is small");

providing questions relating to the attribute to a consumer (see column 12, lines 25-38; column 18, lines 10-67; col 28, lines 45-60 "user profiles include an associative attribute that records the user's relevance feedback on all target objects in the system…rapid profiling procedure can rapidly from a rough characterization of a new user's interests by soliciting the user's feedback on small number of significant target objects, and perhaps also by determining a small number of other key attributes of the new user, by on-line queries, telephone surveys or other means");

receiving answers to the questions from the consumer (see column 18, lines 10-30; col 28, lines 40-67);

determining, using the answers *to the trade-off questions*, preference information associated with the consumer (see column 6, lines 16-59; col 28, lines 40-67);

validating the preference information *determined from the answers to the trade-off questions* (see col 7, lines 1-17; column 30, line 46 – column 31, line 10). Applicant's

specification defines "validating" as "predicting precision of the preference information" (Applicant's specification page 9, lines 4-12). Herz estimates each user's interest in various target objects and generates for each user a customized rank-ordered listing of target objects most likely to be of interest to the user (Herz col 7, lines 1-20); and

mixing using a computing device the preference information *determined from the answers to the trade-off questions* with preference information associated with the plurality of consumers based on the validating step (see column 16, line 52 – column 17, line 57; col 19, lines 7-67; column 21, line 5 – column 22, line 29; col 24, line 60 – col 25, line 60; column 29, lines 1-35).

Herz does not teach that said question are trade-off questions. However, the same argument made in claim 1 regarding this missing limitation is also made in claims 22 and 60.

As per claims 31 and 69 Herz teaches:

A computer-implemented method to produce consumer preference information, comprising:

storing preference information for a plurality of consumers, the preference information relating to an attribute of a product (see col 6, lines 15-67 "target objects may be purchasable items...attributes can be product description"; col 16, lines 60-67 "target objects are consumer goods and the weight of the color attribute is small");

providing questions relating to the attribute to a consumer (see column 12, lines 25-38; column 18, lines 10-67; col 28, lines 45-60 "user profiles include an associative attribute that records the user's relevance feedback on all target objects in the

system…rapid profiling procedure can rapidly from a rough characterization of a new user's interests by soliciting the user's feedback on small number of significant target objects, and perhaps also by determining a small number of other key attributes of the new user, by on-line queries, telephone surveys or other means");

receiving answers to the questions from the consumer (see column 18, lines 10-30; col 28, lines 40-67);

determining, based on the *received trade-off question* answers, consumer preference information associated with the consumer (see column 6, lines 16-59; col 28, lines 40-67);

currency-normalizing, using a computing device, the *trade-off question answer-based determined* consumer preference information (see col 15, lines 35-55; col 16, lines 55-60; col 19, lines 29-60 "likelihood interest").. and

mixing, using a computing device, the currency-normalized *trade-off question answers-based determined* consumer preference information with the preference information of the plurality of consumers (see col 19, lines 7-67; col 21, lines 25-35; col 23, line 40 – col 24, line 10; col 67, lines 1-30).

Herz does not teach that said question are trade-off questions. However, the same argument made in claim 1 regarding this missing limitation is also made in claims 31 and 69.

As per claims 2 and 40, Herz teaches:

wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise

normalized part worth values (see column 19, lines 50-60 "weight of each attribute indicative of users' preference for those target object that have high values for this attributes").

As per claims 3, 41 Herz teaches:

wherein the preference information associated with the consumer and the preference information associated with the plurality of other consumers comprise currency-normalized part worth values (see col 19, lines 7-67 "normative property"; column 65, line 50 – column 66, line 61).

As per claims 4, 27, 42 and 65, Herz teaches:

selecting the plurality of consumers from a group of past consumers based on attribute levels identified as unacceptable by each consumer of the group of past consumers (see column 21, lines 35-67).

As per claims 5, 28, 43 and 66 Herz teaches:

wherein the selected plurality of consumers are members of the group of past consumers who identified similar attribute levels as unacceptable (see column 21, lines 35-67).

As per claims 6, 29, 44 and 67, Herz teaches:

selecting the plurality of consumers from a group of past consumers based on part worth values associated with each consumer of the group of past consumers (see column 19, lines 30-67; col 21, lines 5-35).

As per claims 7, 30, 45 and 68, Herz teaches:

wherein the selected plurality of consumers are members of the group of past consumers who are associated with similar preference information (see column 6, lines 17-59).

As per claims 8, 46, Herz teaches:

wherein mixing the preference information comprises:

normalizing the preference information (see column col 19, lines 7-67; col 15, lines 35-67);

determining consumer subgroups (see column 89, lines 25-50);

assigning the consumer to one of the consumer subgroups (see column 89, lines 25-67); and

mixing preference information associated with the one of the consumer subgroups with the preference information associated with the consumer (see column 87, lines –5-40).

As per claims 9, 47, Herz teaches:

wherein determining consumer subgroups comprises:

assigning past consumers to subgroups based on attribute levels that the past consumers indicated as unacceptable (see column 21, lines 35-67).

As per claims 10, 48, Herz teaches:

wherein determining consumer subgroups comprises assigning past consumers to subgroups based on part worth values associated with the past consumers (see column 5, line 30 – column 6, line 30; col 19, lines 50-60).

As per claims 11, 23, 24, 49, 61 and 62 Herz teaches:

wherein validating the preference information comprises:

predicting consumer answers to the questions based on the preference information associated with the consumer (see column 7, lines 5-17; col 19, lines 9-27; col 28, lines 45-60); and predicting subgroup answers to questions based on the preference information associated with the plurality of consumers (see column 19, lines 8-67), wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the actual answers, the predicted consumer answers and the predicted subgroup answers (see column 23, line 60 – column 24, line 40; col 28, lines 40-67). Herz does not expressly that said question are trade-off questions. However, the same argument made in claim 1 regarding this missing limitation is also made in claims 11, 23, 24, 49, 61 and 62.

As per claims 12, 25, 26, 50, 63 and 64 Herz teaches:

determining a mixing parameter based on the answers, the predicted consumer answers and the predicted subgroup answers, wherein the preference information is mixed with the preference information associated with the plurality of consumers based on the mixing parameter (see column 23, line 60 – column 24, line 40; col 28, lines 40-67).

As per claims 13, 51, Herz teaches:

determining an offer to sell a product based on the mixed preference information (see column 23, line 60 – column 24, line 40).

As per claims 14, 33, 52 and 71, Herz teaches:

providing the offer to the consumer (see column 9, line 55-67).

As per claims 15, 53, <u>Herz</u> teaches:

wherein the first plurality of consumers is identical to the second plurality of consumers (see column 23, line 60 – column 24, line 40).

As per claims 16, 54, <u>Herz</u> teaches:

wherein the first plurality of consumers does not include any consumers belonging to the second plurality of consumers (see column 7, line 50 – column 8, line 47).

As per claims 17, 55, <u>Herz</u> teaches:

wherein one or more of the first plurality of consumers are members of the second plurality of consumers (see column 7, line 50 – column 8, line 47).

As per claims 18, 56, <u>Herz</u> teaches:

wherein the plurality of consumers comprises all past consumers for whom preference information is stored (see column 17, lines 1-10).

As per claims 19, 57, <u>Herz</u> teaches:

wherein the plurality of consumers comprises a predetermined number of past consumers for whom preference information is stored (see column 17, lines 1-56).

As per claims 20, 58, <u>Herz</u> teaches:

wherein the predetermined number of past consumers are determined based on a time at which preference information associated with each of the predetermined number of consumers was collected (see column 18, lines 10-67).

As per claims 21, 59, <u>Herz</u> teaches:

wherein the plurality of consumers comprises all past consumers for whom preference information was collected during a particular time period (see column 18, lines 9-67).

As per claims 32 and 70, <u>Herz</u> teaches:

providing an offer based on the currency-normalized information (see column 29, lines 1-35).

Response to Arguments

4.   Applicant's arguments filed 07/24/2008 have been fully considered but they are not persuasive. The Applicant argues that the prior arts do no teach "validating the trade-off question answers-based determined preference information of the consumer", "mixing, using a computing device, based upon the validating of the trade-off question answers-based determined preference information, the trade-off question answers-based determined preference information of the consumer with the preference information of the plurality of consumers" and "currency normalizing using a computing device, the trade-off question answer-based determined consumer preference information" because according to the Applicant, <u>Herz</u>'s "rank ordered listing of target objects" is not equivalent to "predicting precision of the preference information" and furthermore, <u>Using Extremes</u> does not teach said limitation. The Examiner answers that Applicant's specification defines "validating" as simply "predicting precision of preference information" (see page 9, lines 5-10). <u>Herz</u> teaches a filtering system that predict the preference information of consumers and determines the accuracy of said prediction (i.e. validating) by receiving feedback from questions provided to said

consumers and updating the preference information of said consumers based upon answers to said questions (see col 7, line 62 – col 8, line 5; col 18, lines 10-30). Herz does not teach that said questions are trade-off questions. However, the article Using extremes to design products and segment markets teaches that it is old and well known in the promotion art to use trade-off analysis to determine users' preference to target objects by receiving users response to attributes paired-comparisons involving a fraction of the attributes of said target objects (i.e. "medium fixed interest vs Low fixed interest" see page 8). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Herz would use trade-off analysis to determine users' preference to target objects by receiving users response to attributes paired-comparisons involving a fraction of the attributes of said target objects in view that it is old and well known to do trade-off analysis of products attributes, as taught by Using extremes. Therefore, contrary to Applicant's argument, the prior arts teach Applicant's claimed invention.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-6720 and fax 571-273-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James W. Myhre can be reached on (571)272-6722. The official Fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Raquel Alvarez/
Primary Examiner, Art Unit 3688

/DANIEL LASTRA/
Examiner, Art Unit 3688
October 18, 2008